

CITY OF LINCOLN/LANCASTER COUNTY
CONTRACT AWARD NOTIFICATION
ANNUAL REQUIREMENTS FOR REFLECTIVE SIGN SHEETING
(State Contract No. OC 11451)

DATE: November 16, 2005

CONTRACT PERIOD: October 01, 2005 thru October 31, 2006

CONTRACTOR: 3M Company
Traffic Safety Systems
3M Center Bldg 225 5S 08
Saint Paul, MN 55144-1000

PURCHASING DIVISION
K-STREET COMPLEX
440 SOUTH 8TH STREET
LINCOLN, NEBRASKA 68508
(402) 441-7410

COMPANY REPRESENTATIVE: Dennis Johnson
TELEPHONE NO: 800-246-9793
FAX No.: 888-246-9793

THE CITY/COUNTY'S SPECIFICATIONS AND THE CONTRACTOR'S ACCEPTED PROPOSAL AND PRICING SCHEDULES, NOW ON FILE IN THE OFFICE OF THE CITY CLERK AND/OR THE COUNTY CLERK, ARE ADOPTED BY REFERENCE AND ARE AS FULLY A PART OF THIS CONTRACT FOR THE ABOVE-NAMED COMMODITY AS IF REPEATED VERBATIM HEREIN.

Per Inter-Governmental Purchasing
(State of Nebraska #OC 11451)

NO ACTION NEED BE TAKEN BY THE CONTRACTOR AT THIS TIME. ORDERS FOR MATERIAL WILL BE MADE AS NEEDED BY THE VARIOUS CITY/COUNTY DEPARTMENTS.

DEPARTMENTS REQUIRING CATALOGS AND/OR PRICING SCHEDULES SHALL NOTIFY THE CONTRACTOR DIRECTLY.

E.O. # 074710
Dated: 11-10-05

74710

STATE OF NEBRASKA CONTRACT AWARD

PAGE 1 OF 3	ORDER DATE 10/20/05
BUSINESS UNIT 27227040	BUYER ROBERT THOMPSON

VENDOR ADDRESS:
3M COMPANY
TRAFFIC SAFETY SYSTEMS
3M CENTER BLDG 225 5S 08
SAINT PAUL MN 55144-1000

State Purchasing Bureau
301 Centennial Mail South, 1st Floor
Lincoln, Nebraska 68508

OR
P.O. Box 94847
Lincoln, Nebraska 68509-4847
Telephone: (402) 471-2401
Fax: (402) 471-2089

CONTRACT NUMBER
11451 OC

AN AWARD HAS BEEN MADE TO THE VENDOR NAMED ABOVE FOR THE FURNISHING OF EQUIPMENT, MATERIAL, OR SUPPLIES AS LISTED BELOW FOR THE PERIOD:

OCTOBER 21, 2005 THROUGH OCTOBER 31, 2006

NO ACTION ON THE PART OF THE VENDOR NEEDS TO BE TAKEN AT THIS TIME. ORDERS FOR THE EQUIPMENT OR SUPPLIES WILL BE MADE AS NEEDED BY THE VARIOUS AGENCIES OF THE STATE.

THIS CONTRACT IS NOT AN EXCLUSIVE CONTRACT TO FURNISH THE EQUIPMENT OR SUPPLIES SHOWN BELOW, AND DOES NOT PRECLUDE THE PURCHASE OF SIMILAR ITEMS FROM OTHER SOURCES.

THE STATE RESERVES THE RIGHT TO EXTEND THE PERIOD OF THIS CONTRACT BEYOND THE TERMINATION DATE WHEN MUTUALLY AGREEABLE TO THE VENDOR AND THE STATE OF NEBRASKA.

AWARDED FROM: 975 OF

Contract to supply and deliver REFLECTIVE SHEETING per the attached specifications for a one year period from October 21, 2005 through October 31, 2006.

Contract may be renewed for additional one year periods when agreeable with the State of Nebraska and the vendor.

Contract may be cancelled with 30 days written notice.

Quantities shown are estimates only and are not to be construed to mean firm quantities. The State of Nebraska reserves the right to increase or decrease any quantities shown.


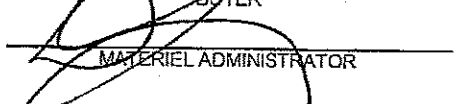
VENDOR CONTACT: Dennis J. Johnson

PHONE: 800-553-1380

FAX: 888-246-9793

E-MAIL: tbdgroup@mmm.com

Line	Description	Est. Qty	UM	Unit Price
1	Type I sheeting Engineer grade	6500	SF	.6600
Original/Bid Document 975 OF, Original Line # 1				
3M Series 3200				
2	type IV High Intensity Prisma	148000	SF	1.0750


BUYER

MATERIEL ADMINISTRATOR

STATE OF NEBRASKA CONTRACT AWARD

State Purchasing Bureau
301 Centennial Mall South, 1st Floor
Lincoln, Nebraska 68508

OR

P.O. Box 94847
Lincoln, Nebraska 68509-4847
Telephone: (402) 471-2401
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CONTRACT NUMBER

11451 OC

PAGE 2 OF 3	ORDER DATE 10/20/05
BUSINESS UNIT 27227040	BUYER ROBERT THOMPSON

Line	Description	Est. Qty	UM	Unit Price
	Original/Bid Document 975 OF, Original Line # 2			
	prismatic			
	3M Series 3930			
3	Type Fluorescent Orange	54000	SF	2.5740
	Original/Bid Document 975 OF, Original Line # 3			
	3M #3924			
4	type fluorescent yellow/green	5000	SF	4.2940
	Original/Bid Document 975 OF, Original Line # 4			
	yellow / yellow-green			
	3M #3983 FL Yellow/Green			
	3M #3981 FL Yellow			
5	Type opaque vinyl	40000	SF	.4900
	Original/Bid Document 975 OF, Original Line # 5			
	3M Series 7725			

STANDARD CONDITIONS AND TERMS OF BID SOLICITATION AND OFFER Invitations to Bid and Contract Awards

It is the responsibility of the bidder to check the website for all information relevant to this solicitation to include addenda and/or amendments issued prior to the opening date. Website address: <http://www.das.state.ne.us/material/purchasing/purchasing.htm>

SCOPE- These standard conditions and terms of bid solicitation and acceptance apply in like force to this inquiry and to any subsequent contract resulting therefrom.

PRICES- Prices quoted shall be net, including transportation and delivery charges fully prepaid by the bidder, F.O.B. destination named in the Invitation to Bid. No additional charges will be allowed for packing, packages or partial delivery costs. When an arithmetic error has been made in the extended total, the unit price will govern.

EXECUTION- Bids must be signed in ink by the bidder on the State of Nebraska's Invitation to Bid form. All bids must be typewritten or in ink on the State of Nebraska's Invitation to Bid form. Erasures and alterations must be initialed by the bidder in ink. No telephone or voice bids will be accepted. Failure to comply with these provisions may result in the rejection of the bid.

FACSIMILE DOCUMENTS- The State Purchasing Bureau will only accept facsimile responses to Invitations to Bid on bids under \$25,000 and up to ten (10) pages. However, two party sealed bids containing facsimile pages are acceptable. No direct facsimile solicitation responses will be accepted for a commodity contract.

VALID BID TIME- Bids shall be firm for a minimum of sixty (60) calendar days after the opening date, unless otherwise stipulated by either party in the Invitation to Bid.

DISCOUNTS- Prices quoted shall be inclusive of ALL trade discounts. Cash discount terms of less than thirty (30) days will not be considered as part of the bid. Cash discount periods will be computed from the date of receipt of a properly executed claim voucher or the date of completion of delivery of all items in a satisfactory condition, whichever is later.

PAYMENT- Payment will be made by the responsible agency in conjunction with the State of Nebraska Prompt Payment Act 81-2401 through 2408. The State may request that payment be made electronically instead of by state warrant.

COLLUSIVE BIDDING- The bidder guarantees that the prices quoted have been arrived at without collusion with other eligible bidders and without effort to preclude the State of Nebraska from obtaining the lowest possible competitive price.

LUMP SUM OR ALL OR NONE BIDS- The State reserves the right to purchase item-by-item, by groups or as a total when the State may benefit by so doing. Bidders may submit a bid on an "all or none" or "lump sum" basis but should also submit a bid on an item-by-item basis. The term "all or none" means a conditional bid which requires the purchase of all items on which bids are offered and bidder declines to accept award on individual items; a "lump sum" bid is one in which the bidder offers a lower price than the sum of the individual bids if all items are purchased but agrees to deliver individual items at the prices quoted.

SPECIFICATIONS- Any manufacturer's names, trade names, brand names, information and/or catalog numbers listed in a specification are for reference and not intended to limit competition, but will be used as the standard by which equivalent material offered will be judged. The State Purchasing Director will be the sole judge of equivalency. The bidder may offer any brand which meets or exceeds the specification. When a specific product is required, the Invitation to Bid will so state. Any item bid is to be the latest current model under standard production at the time of order. No used or refurbished equipment will be accepted, unless otherwise stated.

ALTERNATE/EQUIVALENT BIDS- Bidder may offer bids which are at variance from the express specifications of the Invitation to Bid. The State reserves the right to consider and accept such bids if, in the judgement of the State Purchasing Director, the bid will result in goods and/or services equivalent to or better than those which would be supplied in the original bid specifications. Bidders must indicate on the Invitation to Bid the manufacturer's name, number and shall submit with their bid, sketches, descriptive literature and/or complete specifications. Reference to literature submitted with a previous bid will not satisfy this provision. Bids which do not comply with these requirements are subject to rejection. In the absence of any stated deviation or exception, the bid will be accepted as in strict compliance with all terms, conditions and specifications, and the bidder shall be held liable therefore.

SAMPLES- When requested, samples shall be furnished at the bidders expense prior to the opening of the bid, unless otherwise specified. Each sample must be labeled clearly and identify the bidders name, the Invitation to Bid number and the item number. Samples submitted must be representative of the commodities or equipment which would be delivered if awarded the bid. The State of Nebraska reserves the right to request samples even though this may not have been set forth in the Invitation to Bid. Samples not destroyed in testing will be returned at bidders expense, if requested, or will be donated to a public institution.

RECYCLING- Preference will be given to items which are manufactured or produced from recycled material or which can be readily reused or recycled after their normal use as per State Statute Section 81-15,159.

LATE BIDS- All bids will be time and date stamped upon receipt by the State Purchasing Bureau, and this shall be the official time and date of receipt. Bids received after the time of the bid opening will be considered late bids and will be returned to the bidder unopened. The State Purchasing Bureau is not responsible for late bids or lost requests due to mail service inadequacies, traffic or other similar reasons.

BID OPENING- Openings shall be public on the date and time specified on the Invitation to Bid form. It is the bidder's responsibility to assure the bid is delivered at the designated date, time and place of the bid opening. Telephone bids are not acceptable. A bid may not be altered after opening of the bids.

NO BID- If not submitting a bid, respond by returning the Invitation to Bid form explaining the reason in the space provided. Failure to respond to an Invitation to Bid may be cause for the removal of the bidder's name from the mailing list. NOTE: To qualify as a respondent, bidder must submit a "NO BID" and it must be received no later than the stated bid opening date and time.

AWARD- All purchases, leases, or contracts which are based on competitive bids will be awarded to the lowest responsible bidder, determined according to the provisions of State Statute Section 81-181, R.R.S. 1943. The State reserves the right to reject any or all bids, wholly or in part and to waive any deviations or errors that are not material, do not invalidate the legitimacy of the bid and do not improve the bidders competitive position. All awards will be made in a manner deemed in the best interest of the State.

BID TABULATIONS- Tabulations will be furnished upon written request. A self-addressed, stamped envelope which must include the agency and solicitation number must be enclosed. Bid tabulations will not be provided by telephone or facsimile. Bid files may be examined during normal working hours by appointment. Bid tabulations are available on the website at: <http://www.das.state.ne.us/material/purchasing/bidtabs.htm>

PERFORMANCE AND DEFAULT- The State reserves the right to require a performance bond from the successful bidder, as provided by law, without expense to the State. Otherwise, in case of default of the contractor, the State may procure the articles from other sources and hold the contractor responsible for any excess cost occasioned thereby.

IN-STATE PREFERENCE- A resident bidder shall be allowed a preference against a nonresident from a state which gives or requires a preference to bidders from that state. The preference shall be equal to the preference given or required by the state of the nonresident bidders. Where the lowest responsible bid from a resident bidder is equal in all respects to one from a nonresident bidder from a state which has no preference law, the resident bidder shall be awarded the contract.

NONDISCRIMINATION- The Nebraska Fair Employment Practice Act prohibits contractors of the State of Nebraska, and their subcontractors, from discriminating against any employee or applicant for employment, to be employed in the performance of such contracts, with respect to hire, tenure, terms, conditions or privileges of employment because of race, color, religion, sex, disability, or national origin. (State Statute Sections 48-1101 through 48-1125) The bidder guarantees compliance with the Nebraska Fair Employment Practice Act, and breach of this provision shall be regarded as a material breach of contract. The contractor shall insert a similar provision in all subcontracts for services to be covered by any contract resulting from this Invitation to Bid.

TAXES- Purchases made by the State of Nebraska are exempt from the payment of Federal Excise Taxes, and exemption certificates will be furnished on request. State and local taxes are exempt by State Statute Section 77-2704 (f) (m) R.R.S. 1943 and must not be included in the bid prices. Exemption by statute precludes the furnishing of State exemption certificates.

DRUG POLICY - Bidder certifies that it maintains a drug free work place environment to ensure worker safety and workplace integrity. Contractor agrees to provide a copy of its drug free workplace policy at any time upon request by the State.

GRIEVANCE AND PROTEST- Grievance and protest procedure is available by contacting the buyer. Protest must be filed within ten (10) days of award.

NE ACCESS TECHNOLOGY STANDARDS- Vendor agrees to ensure compliance with Nebraska Access Technology Standards. See website at: <http://www.nitc.state.ne.us/standards/accessibility/>

Revised: 02/2004

Nebraska Department of Roads
Reflective Sheeting
Qualified Bidders
August 3, 2005

The following vendors are the only pre-approved qualified suppliers of ASTM type I, IV sheeting and Fluorescent Reflective Sheeting to the Nebraska Department of Roads.

1. 3M Traffic Control Materials Division
3M Center Building
3130 Lexington Avenue South
St. Paul, MN 55133-3211
2. Avery Dennison
Reflective Products Division
6565 W. Howard Street
Niles, IL 60714

Qualification for approval was determined by the Department of Roads, Traffic Engineering Division based on the following criteria:

1. Ability to provide all required colors of reflective sheeting including reflective fluorescent orange, yellow-green and yellow, and also all process inks required.
2. Rolled sheeting available in variety of width up to 48".
3. Have provided the Department of Roads adequate samples of reflective sheeting and inks for testing and evaluation.
4. Satisfactory acceptance from Sign Shop Evaluation of sheeting handling, application, trimming, and screen printing.
5. One-part process inks.

Scope

Bidders shall supply and deliver Reflective Sign Sheeting in accordance with the following contract conditions and attached specifications delivered to the Department of Roads location as shown on the attached bid sheet.

Term of Contract

This contract is in effect for a period of one year from the date of award, and may be renewed, upon satisfactory performance, for up to 2 additional one-year periods when agreeable with the State of Nebraska and the vendor.

Noncompliance Statement

Read these specifications carefully. Any and all exceptions to these specifications must be written on or attached to quotation request. Any noncompliance may void your quotation.

It is the responsibility of Bidders to obtain information and clarifications as provided below. The State of Nebraska is not responsible for any erroneous or incomplete understandings or wrongful interpretations of this Invitation to Bid by any Bidder.

No interpretation related to the meaning of bid specifications or other pre-bid documents will be made orally to any Bidder by the State of Nebraska. Any request for bid interpretation must be put in writing and faxed by the Bidder to: State Purchasing Bureau, 301 Centennial Mall South, PO Box 94847, Lincoln, NE 68509, Fax (402) 471-2089
(inquiries received within 48 hours of bid opening may not be addressed).

Rights

The State reserves the right to reject any and all bids, wholly or in part, to waive any technicality in any bid, to make awards in a manner deemed in the best interest of the State and, unless otherwise specified by the bidder, to accept any item in the bid.

The State of Nebraska reserves the right to award item-by-item, or total low of all items, whichever is in the best interest of the State of Nebraska.

Contract supplier or suppliers may honor pricing and extend the contract to political sub-divisions, cities and counties. Terms and conditions of the contract must be met by political sub-divisions, cities and counties. Under no circumstances shall the State of Nebraska be contractually obligated or liable for any purchases by political sub-divisions, cities or counties.

Cancellation Clause

The contract may be terminated at any time upon the mutual consent of the parties, or by either party, with or without cause, upon 30 days written notice to the other party.

Breach of Contract

If the Contractor breaches this Contract, the State of Nebraska may, at its discretion, terminate the Contract immediately upon written notice to the Contractor. State of Nebraska shall pay the Contractor only for such

performance as has been properly completed and is of use to the State of Nebraska. The State of Nebraska may, at its discretion, contract for provision of the goods or services required to complete this Contract and hold the Contractor liable for all expenses incurred in such additional contract over and above the total cost of performance. This provision shall not preclude the pursuit of other remedies for breach of contract as allowed by law.

Annual Usage

This is an open-ended contract between the vendor and the State of Nebraska to furnish an undetermined quantity of reflective sheeting, as specified, in a given period of time. An estimated annual usage for each type is listed with the attached specifications and is for reference only and is not to be construed to be either a minimum or maximum.

Price

Price quoted shall be unit price (per square foot) and be firm for 180 days from date of an award and are to be net; including transportation and delivery charges fully prepaid by the bidder F.O.B. destination as specified. No additional charges will be allowed for packing, handling, or partial delivery costs. Any request for an increase must be submitted in writing to the State Purchasing Bureau a minimum of 30 days prior to proposed effective date of increase, and must show cause and be accompanied by supporting documentation (such as notification letter from the manufacturer). Further documentation may be required by the State, to authenticate the increase (such as manufacturer invoices). Failure to supply any requested supporting documentation may be grounds to cancel the contract. The State further reserves the right to reject any proposed price increase(s), cancel the contract and re-bid if determined to be in the best interest of the State. The State will be given immediate, full proportionate benefit of any decrease for the term of the contract.

DELIVERY

Between 9:00 AM and 3:00 PM, daily, except Sunday, Saturday and holidays. To: Nebraska Department of Roads Sign Shop, 5001 South 14th Street, Lincoln, Nebraska, 68512.

Orders will be placed on an as needed basis and material must be delivered to the Sign Shop within 30 days after receipt of order.

Nebraska Department of Roads

**SPECIFICATIONS FOR
REFLECTIVE SIGN SHEETING
(Type I, IV and Type Reflective Fluorescent)**

Description: The reflective sheeting shall be of: Type I – a enclosed lens glass bead sheeting (engineer grade), Type IV - a microprismatic retroreflective element sheeting (high intensity prismatic), and a Type reflective fluorescent microprismatic sheeting. The reflective sign sheeting shall meet the requirements of ASTM D 4956 latest revision and supplements, as amended to or added to by this specification. The Type I and IV reflective sheeting shall include, but not be limited to the following colors: White, Yellow, Green, Red, Blue, Brown, Orange, and Prestriped Orange/White (left and right). Prestriped sheeting shall meet the width of stripe requirements of the MUTCD. Reflective fluorescent microprismatic sheeting shall be fluorescent Orange, Yellow-Green or Yellow.

Adhesive backing: shall be class I and protected by an easily removable liner.

Minimum Performance of Retroreflection:

Type I and Type IV sheeting shall be as required in ASTM D4956. ASTM Type II sheeting may be substituted for Type I sheeting.

Fluorescent Orange sheeting shall meet or exceed the minimum coefficient of retroreflective values as shown in table 1.

Table 1. Minimum Coefficient of Retroreflection, Fluorescent Orange
(Candelas per foot candle per sq. foot)

Observation Angle	Entrance Angle	Fluorescent Orange
0.2	-4	200
0.2	30	92
0.5	-4	80
0.5	30	50

Fluorescent Yellow-Green and fluorescent Yellow sheeting shall meet or exceed the minimum coefficient of retroreflective values as shown in table 2.

Table 2. Minimum Coefficient of Retroreflection, Fluorescent Yellow-Green and Yellow
(Candelas per foot candle per sq. foot)

Observation Angle	Entrance Angle	Fluorescent Yellow-Green	Fluorescent Yellow
0.2	-4	325	240
0.2	30	200	150
0.5	-4	235	165
0.5	30	105	75

Daytime color:

For Type I and Type IV shall be as per ASTM D4956.

Daytime color of fluorescent Orange, Yellow-Green and Yellow shall conform to the requirements of table 3 for chromaticity Coordinates.

Table 3. Color Specification Limits (Daytime)

	1		2		3		4	
	x	y	x	y	x	y	x	y
Fluorescent Orange	.583	.416	.535	.400	.595	.351	.645	.355
Fluorescent Yellow-Green	.387	.610	.369	.546	.428	.496	.460	.540
Fluorescent Yellow	.479	.520	.446	.483	.512	.421	.557	.442

Note: the four pairs of chromaticity coordinates determine the acceptable color in terms of the CIE 1931 standard colorimetric system measured with illuminant D65.

Daytime Luminance/Maximum Spectral Radiance Factor for fluorescent Orange, Yellow-Green and Yellow shall be in accordance with manufacturer's requirements to ensure the appearance of the fluorescent colors.

Nighttime color:

Nighttime color for Type I and Type IV shall be per ASTM D4956. Night time color of fluorescent Orange, Yellow-Green and Yellow shall conform to the requirements of table 4 for chromaticity Coordinates. Nighttime color for fluorescent Yellow-Green and Yellow shall reflect a vibrant yellow color.

Table 4. Color Specification Limits (Nighttime)

	1		2		3		4	
	x	y	x	y	x	y	x	y
Fluorescent Orange	.625	.375	.589	.376	.636	.330	.669	.331
Fluorescent Yellow-Green	.480	.520	.473	.490	.523	.440	.550	.449
Fluorescent Yellow	.554	.445	.526	.437	.569	.394	.610	.390

Note: the four pairs of chromaticity coordinates determine the acceptable color in terms of the CIE 1931 standard colorimetric system measured with illuminant D65.

Specular Gloss: The retroreflective sheeting shall have an 85 degree specular gloss of not less than 50 for Type IV and reflective fluorescent orange sheeting and not less than 40 for fluorescent Yellow-Green and Fluorescent Yellow, when tested in accordance with ASTM D 523.

Artificial Weathering: Retroreflectivity measurements for reflective fluorescent orange shall be made at angles of 0.2 degrees observation, -4 degrees entrance and have a coefficient of retroreflection of not less than 50% of table 2 above.

Manufactures Reflective Sheeting Currently Approved are:

Type I or II Reflective Sheeting:

3M - 3270 Series

Avery Dennison - T1000 Series or T2000 Series

Type IV Reflective Sheeting:

3M – 3930 Series

Avery Dennison – T6000 Series

Type Fluorescent Orange Sheeting

3M – 3924 Series

Avery Dennison – W-7514 Series

Type Fluorescent Yellow and Yellow/Green Series:

3M – 3983 Series

Avery Dennison – T7000 Fluorescent Series

General Characteristics and Packaging:

Rolls of reflective sheeting shall be available as a minimum in the following sizes:

Color	Width (inches)	Length (yards)
White	1, 2, 3, 6, 8, 9, 12, 12 ³ / ₄ , 18, 20 ³ / ₄ , 24, 30, 36, 42, 48	50 or 100
Yellow, Red, Blue, Green, & Brown	12, 12 ³ / ₄ , 15, 18, 24, 30, 36, 42, 48	50 or 100
Orange	12, 12 ³ / ₄ , 15, 18, 24, 30, 36, 48	50 or 100
Barricade Orange/White	4, 6, 7 ³ / ₄ , 8, 10, 11 ³ / ₄ , 12, 18, 24, 25	50 or 100
Fluorescent Orange	12, 12 ³ / ₄ , 18, 24, 30, 36, 48	50 or 100
Fluorescent Yellow-Green	12, 18, 24, 30, 36, 48	50 or 100
Fluorescent Yellow	12, 18, 24, 30, 36, 48	50 or 100

Nominal roll sheeting sizes shall have the following actual widths:

Nominal Width	Actual Width	Tolerance
1"	Width +1/32"	+/- 1/32"

2" to 6"	Width + 1/16"	+/- 1/16"
12" to 18" *	Width + 1/8"	+/- 1/16"
24" to 30"	Width + 1/4"	+/- 1/16"
36"	Width + 3/8"	+/- 1/16"
48"	Width + 1/2"	+/- 1/16"

Nominal width of sign sheeting shall be used for all bidding, procurement and expense calculations.

* 12 3/4" sheeting width shall be the actual size of 12 3/4" +/- 1/32".

The reflective sheeting as supplied shall be free from ragged edges, cracks, and extraneous materials, and shall be furnished in both rolls and sheets. When the reflective sheeting is furnished in continuous rolls an average number of splices shall not be more than one splice per roll, and shall be suitable for continuous application.

Rolls of reflective sheeting shall be packaged in such a manner that damaged to reflective sheeting does not occur. Roll width of 24 inches or wider will be packaged one roll per container. Rolls wider than 6 inches and 10 yards in length or longer shall be supported and suspended by the roll core within the cartons by means of plastic plugs or plugs with built-up and reinforced corrugated pads.

Cut sheets shall be packaged flat between pressed composition boards or corrugated pads of the same dimensions as the sheets and shall be packed in accordance with commercially accepted standards and in accordance with recommendations of the sheeting manufacturer.

All packages with damage to reflective sheeting will be rejected.

The reflective sheeting as supplied, stored under normal conditions, shall be suitable for use for at least one year after purchase.

Quality Assurance:

- a. Prior to contract approval, the vendor shall furnish a Certified Test Report conforming to the requirements stated herein below for all reflective sheeting supplied under these specifications.
1. A Certified Test Report is a document containing a list of the dimensional, chemical and physical results obtained by an independent, approved testing organization from an actual test of the types of materials involved, and shall certify that the materials meet the requirements of the specifications and shall include the following information:
 - a) Description of material.
 - b) State of Nebraska Purchase Order Number
 - c) Date of Manufacture
 - d) Date of testing
 - e) Name of organization to which the material is consigned
 - f) Quantity of material represented
 - g) Means of identifying the consignment such as label, marking, lot number, etc.
 - h) Date and method of shipment

- i) Name of organization performing tests
- b. The Certified Test Report shall be signed by an authorized and responsible agent for the organization supplying the material, and it shall be notarized.

Technical Advise: The bidder shall be responsible throughout the duration of this bid for providing the Department of Roads with technical information relative to the type of equipment, or modifications to present equipment and the procedures, and the techniques necessary to apply the reflective sheeting in strict accordance with the sheeting manufacturer's recommendations.

If deemed necessary by the Department, the bidder shall make available to the Department of Roads Sign Shop the services of a qualified representative of the sheeting manufacturer who shall furnish technical advice concerning application of the reflective sheeting.

Perforated reflective sheeting

- a. Description: The Type IV and Fluorescent Reflective sheeting are to have both edges perforated so that they are completely compatible for use in an electronic cutting apparatus.
- b. Requirements: The requirements of "Type IV and Fluorescent Reflective sheeting" as outlined in the previous sections shall also pertain to "Perforated Reflective Sheeting" as to brightness, color, adhesive characteristics, photometry, packaging, etc.

Opaque Vinyl film

The vendor shall also provide pressure sensitive opaque vinyl film for an over laminate film in manufacturing signs and fully compatible with electronic computer sign cutter.

The materials currently approved for each vendor are:

3M – Scotchcal ElectroCut Graphic Film Series 7725
Avery Dennison – A8 Opaque Overlay Film

Material specification shall be per manufactures requirements and published product bulletin sheets. The Opaque black vinyl warranty shall be compatible with the warranty of the reflective sheeting of the materials the vinyl is applied to. For black vinyl not used with reflective sheeting the warranty will be the same as the published product bulletin.

Additional Requirements

In addition to the above stated requirements, the following conditions shall be met:

1. **PROCESS INKS**
The manufacturer of the sheeting being offered shall furnish at no additional cost the process inks in standard traffic colors, clears and thinners recommended for the sheeting to meet the performance

requirements of this specification, and shall further be responsible for technical assistance in the use of these inks.

2. **SLIP SHEET**

Slip sheet paper, for use in packaging, storing or shipping finished signs, shall be furnished in rolls by the manufacturer at no additional charge, in at least equal square footage and in the same widths as the sheeting supplied.

3. **WASHERS**

Washers, to protect the sign surface from damage by bolts or other fasteners, shall be furnished by the manufacturer at no additional charge.

WARRANTY

Reflective Sheeting

Warranty for Type I sheeting shall be as per manufacturers' standard warranty.

Type IV and reflective fluorescent sheeting will retain its effectiveness as a component of traffic control and guidance signs and meet the following minimum retroreflective values for the period specified as follows:

Minimum Coefficient of Retroreflection, Type IV Sheeting
Candelas per footcandle per square foot
(0.2° observation angle and -4.0° entrance angle)

Color	7 years from the date of sign fabrication*	10 years from the date of sign fabrication*
White	288	250
Yellow	216	170
Fluorescent Yellow	192	168
Fluorescent Yellow-Green	260	227
Green	40	35
Red	52	45
Blue	24	20
Brown	14	12

* For transparent color screen printed areas on White sheeting, Coefficient of Retroreflection values shall be a minimum of 70% of the above. All measurements will be made after cleaning in accordance with manufacturer's products recommendations.

Type IV sheeting if within 7 and 10 years of sign fabrication the sheeting deteriorates due to natural causes to the extent that the sign is ineffective for its intended purpose when viewed from a moving vehicle under normal day and night conditions, or fails to retain the minimum coefficient of retroreflection values for the period specified above, the sheeting manufacturer shall furnish a replacement amount of like sheeting at no cost to enable the sign surface to be restored to its warranted effectiveness. Type IV sheeting if within 7 years of sign fabrication such deterioration occurs or the sheeting fails to retain the minimum coefficient of retroreflection

values for the period specified above, the sheeting manufacturer shall restore the sign surface to its warranted effectiveness at no cost to the Department of Roads for materials or labor.

All orange sheeting if within 3 years of sign fabrication fails to meet 50% of coefficient of retroreflection (0.2° observation angle, -4.0 entrance angle) of new sheeting, the sheeting manufacturer shall furnish replacement amount of like sheeting at no cost to the Department.

Catalogs and price List: Manufacturer shall furnish four (4) sets of the latest manufacturers' complete catalog and discounted price lists. All prices offered in the manufacturers price lists, catalog and literature will hold for the entire term of the contract and all references contained in the manufacturers information with regard to FOB points, shipping charges, taxes, escalation clauses, etc. are therefore waived.

ESTIMATED ANNUAL QUANTITIES

Based on the past year orders, it is estimated the quantities indicated below will be ordered during a one year period of the contract. These are estimates only, and are not guaranteed quantities. The State of Nebraska reserves the right to increase or decrease any quantities shown.

Estimated Annual Quantities Chart	
Type I Sheeting (Engineer Grade)	6,500 Sq. Ft.
Type IV Sheeting (High Intensity Prismatic)	148,000 Sq. Ft.
Type Fluorescent Orange	54,000 Sq. Ft.
Type Fluorescent Yellow / Yellow-Green	3,700 Sq. Ft.
Type Opaque Vinyl	38,700 Sq. Ft.

Meets Specification - Please Indicate - (if other explain on comment line)

YES NO OTHER 1. ADHESIVE BACKING:

X _____

A. Class I backing

X _____

B. Protected by easily removable liner.

Other or Comment _____

YES NO OTHER

X _____

X _____

X _____

2.

MINIMUM PERFORMANCE OF RETROREFLECTION:

A.

Type I and Type IV sheeting meet requirements in ASTM D4956 (Type I sheeting may be substituted by ASTM Type II).

B.

Fluorescent Orange sheeting meets or exceeds the minimum coefficient of retroreflective values as shown in table 1 (Page 3).

C.

Fluorescent Yellow-Green and fluorescent Yellow sheeting meets or exceeds the minimum coefficient of retroreflective values as shown in table 2 (Page 3).

Other or Comment _____

YES NO OTHER

X _____

3.

DAYTIME COLOR:

A.

Daytime color of fluorescent Orange, Yellow-Green and Yellow conform to the requirements of table 3 (Page 4) for the Chromaticity Coordinates.

Other or Comment _____

YES NO OTHER

X _____

X _____

4.

NIGHTTIME COLOR:

A.

Nighttime color of fluorescent Orange, Yellow-Green and Yellow conform to the requirements of table 4 (Page 4) for chromaticity Coordinates.

B.

Nighttime color for fluorescent Yellow-Green and Yellow reflect a vibrant yellow color.

Other or Comment _____

YES NO OTHER

X _____

X _____

X _____

X _____

5.

SPECULAR GLOSS:

A.

The retroreflective sheeting has an 85 degree specular gloss of not less than 50 for Type IV (when tested in accordance with ASTM D 523).

B.

The retroreflective sheeting has an 85 degree specular gloss of not less than 50 for reflective fluorescent orange sheeting (when tested in accordance with ASTM D 523).

C.

The retroreflective sheeting has an 85 degree specular gloss of not less than 40 for fluorescent Yellow-Green (when tested in accordance with ASTM D 523).

D.

The retroreflective sheeting has an 85 degree specular gloss of not less than 40 for Fluorescent Yellow (when tested in accordance with ASTM D 523).

Other or Comment _____

YES NO OTHER

6.

NOMINAL ROLL SHEETING ACTUAL WIDTHS:

X _____

A. The manufacture meets the actual widths that are found in the table below.

Other or Comment: _____

Nominal Width	Actual Width	Tolerance
1"	Width + 1/32"	+/- 1/32"
2" to 6"	Width + 1/16"	+/- 1/16"
12" to 18"	Width + 1/8"	+/- 1/16"
24" to 30"	Width + 1/4"	+/- 1/16"
36"	Width + 3/8"	+/- 1/16"
48"	Width + 1/2"	+/- 1/16"

YES NO OTHER

 X _____

 X _____

7. PERFORATED REFLECTIVE SHEETING:

- A. The Type IV and Fluorescent Reflective sheeting have both edges perforated so that they are completely compatible for use in an electronic cutting apparatus.
- B. The perforated reflective sheeting meets all requirements in previous sections; such as, brightness, color, adhesive characteristics, photometry, packaging, etc.

Other or Comment: _____

YES NO OTHER

 X _____

Other or Comment: _____

8. OPAQUE VINYL FILM:

- A. Vendor provides pressure sensitive opaque vinyl film for an over laminate film in manufacturing signs and fully compatible with electronic computer sign cutter.

YES NO OTHER

 X _____

and

 X _____

9. PROCESS INKS:

- A. Furnish at no additional cost the process inks in standard traffic colors, clears and thinners recommended for the sheeting to meet the performance requirements of this specifications.
- B. Free technical assistance available for the inks used.

Other or Comment: _____

YES NO OTHER

 X _____

Other or Comment: _____

10. SLIP SHEET:

- A. Slip sheet paper, for use in packaging, storing or shipping finished signs, are furnished in rolls by the manufacturer at no additional charge, in at least equal square footage and in the same widths as the sheeting supplied.